APRIL/MAY 2024

23UEBT12 — BIOLOGICAL CHEMISTRY

Time : Three hours Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. Define electrophile.
2. Explain the term free radical.
3. Define molarity.
4. Explain about pH scale.
5. List any two properties of water.
6. Explain the term glycogenesis.
7. What are compound lipids?
8. Outline the structure of triglycerides.
9. What are sulphur containing aminoacids?
10. Summarize the functions of Vitamin D.

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SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions.

11. (a) Identify and explain the postulates of Dalton's atomic theory.

Or

(b) Examine the hybridization in benezene.

12. (a) Organize the properties of acids and bases.

Or

(b) Examine Lowry and Bronsted theory.

13. (a) Organize the classification of carbohydrates.

Or

(b) Analyze about Cori cycle.

14. (a) Identify and list the importance of lipids.

Or

(b) Distinguish between DNA and RNA.

15. (a) Organize the steps involved in urea cycle.

Or

(b) Analyze the functions of Pancreatic hormones.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Explain the types of reactions with an example.

17. Explain the different ways utilized to express concentration of solution.

18. Appraise about the reactions of TCA cycle.

19. Elaborate on the classification of lipids.

20. Discuss the classification of vitamins.

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